

SECONDARY ROAD CONSTRUCTION PROCESS

PURPOSE:

To develop a critical path timeline and tracking mechanism which incorporates the various design, permitting, and construction activities associated with a typical secondary road construction project.

NARRATIVE:

In order to keep a secondary road construction project on track for timely completion, several important inputs are required from various departments and permitting agencies. In addition, some of this input is often required prior to right-of-way acquisition in order to avoid problems midway through the permitting process and/or final design. To accomplish this end, a critical path timeline is proposed which incorporates the necessary inputs and reasonable timetables for each task to be accomplished. Based on this timeline, project conception (either from Priority List, Hold List, or Road Addition) should begin two years ahead of anticipated construction start. Upon completion of initial design (survey, topo, staking) but prior to right-of-way acquisition, the Division Environmental Officer (DEO) should be contacted to perform a preliminary review to identify any areas of concern that may require special design consideration such as modified typical sections and/or shifting of proposed alignment. The preferred method of communicating this information to the DEO is via the *Environmental Review List*. As soon as the preliminary review is complete and preliminary plans are available, the DEO is to send the plans for State Historic Preservation Office (SHPO) review. This review will take 3-6 months for completion. If it is anticipated that any pipes will need to be upsized to greater than 48 inches and/or if the local engineer is uncomfortable sizing a particular location, the County Maintenance Engineer (CME) and/or District Engineer (DE) will need to contact the Hydraulics Unit for sizing. This is also the appropriate time to have Bridge Maintenance review any existing pipes or bridges that they currently maintain on the route. Once the preliminary reviews are completed and any necessary adjustments are made to typicals / alignments, then the right-of-way acquisition process can begin. This process can be lengthy and up to one year is allowed in the timeline. During this time, the DE will need to make an annual presentation to the County Commissioners regarding the proposed Secondary Road Construction Program (typically done in May). As right-of-way is made available, the Right-of-Way Agent in conjunction with the DE will need to coordinate utility relocations. To get utility relocation underway, the DE will need to establish a project WBS and forward this information to the Right-of-Way agent. In addition, the DE will need to forward the WBS and plans to CME for construction review. The CME will then provide careful plan review for pipe extensions, replacements, additions, and deletions; any special erosion control concerns; any special grading concerns; and any special typical sections. In addition, the CME will coordinate with the DEO for permit review of pipe crossings and wetland delineation (suggest use of *Environmental Review List* for communicating and tracking). If the results of the Hydraulic Unit's analysis indicate that the project will require pipes greater than 48 inches, the CME will need to coordinate with Bridge Maintenance for pipe design review and ordering (if applicable) and with the DEO for permit reviews. Please note that the timetable for receiving ordered pipe and obtaining permits is typically several months. Upon determination of all construction needs and coordination with DEO for permitting, the CME forwards the review information to the DE and DE prepares final design plans to include pipe data, erosion control plans, wetland delineation, and stream surveys. Upon completion of the final design plans, DE to forward hard copy and necessary electronic data files to DEO for permit documentation and forward hard copies to Area Roadside for Erosion Control review. Upon receipt of approved permits, erosion control plan, and Minimum Criteria Checklist (MCC) construction activities may

begin. It is ideal that the utilities be relocated as the first phase of construction, although this is not always possible. The next phase of construction would be for the DE to coordinate with Bridge to determine proposed pipe installation dates, then coordinate with Traffic Services to schedule road closure / detours. Once road closures are scheduled, DE will confirm road closure date with Bridge Maintenance and Bridge Maintenance will install large pipes. From this point, either the CME will coordinate grading, drainage, and stabilization through Force Account Construction or the DE will let a contract for the work. If staged and/or permanent seeding services are required from Roadside Environmental, then this work needs to be coordinated through local Roadside Environmental Supervisor as soon as possible with an early 'heads up' to Roadside Environmental for supplies ordering in January and July. Regardless of whether grading, drainage, and stabilization is performed by Force Account or by contract, the DE is responsible for letting a paving contract, preferably in combination with other similar projects for the purpose of obtaining better bid prices. Once the road is paved and the shoulders graded, the shoulders have to be permanently seeded either by contract or by Force Account (Roadside Environmental). It is recommended that the DE coordinate this activity. Upon completion of the shoulder seeding, the DE should forward a Traffic Services Request to Traffic Services to have the road striped and reviewed for signing. Once signing / marking complete and permanent seeding is established, the CME and DEO will sign the compliance reports as complete. A final erosion control review notification will be sent from Roadside Environmental to CME via e-mail and the erosion control measures will be removed. The final step is a final inspection by the Division Maintenance Engineer – this completes the process. Because there are so many critical time sensitive tasks, it is recommended that the *Division Secondary Construction Tracking Program* be utilized to keep projects on schedule.

SUGGESTED PRACTICES:

Environmental Review List – A Word based table that is to be utilized in transmitting / updating information to the DEO. The table includes location, description of existing versus proposed pipes size / length, and a status check-off for review date, permit required, permit received, MCC received.

Division Secondary Construction Tracking Program – A computer based system that lists target dates for milestones (critical tasks) and includes check-off box for actual date milestones completed. NOTE: Committee is currently reviewing software applications to determine which is most applicable.